

AD-A113 887 ARMY ELECTRONICS RESEARCH AND DEVELOPMENT COMMAND WS--ETC F/6 4/2
12833A LANCE MISSILE NUMBER 4577, ROUND NUMBER 374-MSL, 25 FEBR--ETC(U)
FEB 82 D C KELLER
UNCLASSIFIED ERADCOM/ASL-DR-1224 NL

UNCLASSIFIED

NL

1 PF
AP A
1 5 9 9 2

END
DATE
FILMED
05-82
DTIC

12

APPROVED FOR PUBLIC RELEASE; DISTRIBUTION UNLIMITED

AD
DR 1224
Feb 82

AD A113887

METEOROLOGICAL DATA REPORT

12833A Lance
Missile Number 4577
Round Number 374-MSL
25 February 1982

by

DONALD C. KELLER
Program Support Coordinator
Phone Number (505) 679-9568
AVN Number 349-9568

ATMOSPHERIC SCIENCES LABORATORY
WHITE SANDS MISSILE RANGE, NEW MEXICO

ECOM

UNITED STATES ARMY ELECTRONICS COMMAND

DTIC
ELECTE
S APR 27 1982
E

82 04 26 182

DISPOSITION INSTRUCTIONS

Destroy this report when it is no longer needed. Do not return to the originator.

DISCLAIMER

The findings in this report are not to be construed as an official Department of the Army position, unless so designated by other authorized documents.

The citation of trade names and names of manufacturers in this report is not to be construed as official Government indorsement or approval of commercial products or services referenced herein.

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER DR 1224	2. GOVT ACCESSION NO. AD-A113887	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) 12833A Lance, Missile Number 4577, Round Number 374-MSL		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) White Sands Meteorological Team		8. CONTRACT OR GRANT NUMBER(s) DA TASK 1F665702D127-02
9. PERFORMING ORGANIZATION NAME AND ADDRESS		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS US Army Electronics Research & Development Cmd Atmospheric Sciences Laboratory White Sands Missile Range, New Mexico 88002		12. REPORT DATE Feb 82
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office) US Army Electronics Research & Development Cmd Adelphi, MD 20783		13. NUMBER OF PAGES 34
		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report)		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report) Approved for public release; distribution unlimited.		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number)		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Meteorological data gathered for the launching of the 12833A Lance, Missile No. 4577, Round Number 374-MSL presented in tabular form.		

DD FORM 1 JAN 73 1473

EDITION OF 1 NOV 65 IS OBSOLETE

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

CONTENTS	PAGE
INTRODUCTION -----	1
DISCUSSION -----	1
GENERAL AREA MAP -----	2
TABLES	
1. Surface Observation Taken at 0906 MST at Don Site	3
2. Pilot-balloon Measured Wind Data at 0851 MST at Don Site -----	4
3. Pilot-balloon Measured Wind Data at 0906 MST at Don Site -----	5
4. Pilot-balloon Measured Wind Data at 0856 MST at LC-36 -----	6
5. Pilot-balloon Measured Wind Data at 0906 MST at LC-36 -----	7
6. Computer Met Message Data -----	8
7. WSD Significant Level Data at 0850 MST -----	9
8. WSD Upper Air Data at 0850 MST -----	11
9. WSD Mandatory Levels at 0850 MST -----	16
10. NW-30 Significant Level Data at 0800 MST -----	17
11. NW-30 Upper Air Data at 0800 MST -----	19
12. NW-30 Mandatory Levels at 0800 MST -----	23
13. Jallen Significant Level Data at 0850 MST -----	24
14. Jallen Upper Air Data at 0850 MST -----	26
15. Jallen Mandatory Levels at 0850 MST -----	31



ii

Accession For	NTIS GRA&I	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	DTIC TAB			
	Unannounced			
	Justification			
By				
Distribution/				
Availability Codes				
Avail and/or				
Dist				
Special				

INTRODUCTION

12833A Lance, Missile Number 4577, Round Number 374-MSL, was launched from Don Site, White Sands Missile Range (WSMR), New Mexico, at 0906 MST, 25 Feb 1982. The scheduled launch time was 0900 MST.

DISCUSSION

Meteorological data were recorded and reduced by the White Sands Meteorological Team, Atmospheric Sciences Laboratory (ASL), White Sands Missile Range, New Mexico. The data were obtained by the following methods:

1. Observations

a. Surface

(1) Standard surface observations to include pressure, temperature ($^{\circ}\text{C}$), relative humidity, dew point ($^{\circ}\text{C}$), density (gm/m^3), wind direction and speed, and cloud cover were made at the Don Met Site at T-0 minutes.

(2) Monitor of wind speed and direction from one anemometer was provided in the launch control room.

b. Upper Air

(1) Low level wind data were obtained from Single Theodolite pilot-balloon observations at:

SITE AND ALTITUDE

Don Site	1260 meters	0960 MST
Don Site	1380 meters	0851 MST
LC-36	2760 meters	0906 MST
LC-36	2760 meters	0856 MST

(2) Air structure data (rawinsonde) were collected at the following Met Sites.

SITE AND TIME

WSD	0850 MST
NW-30	0800 MST
Jallen	0850 MST

WSMR METEOROLOGICAL SITES

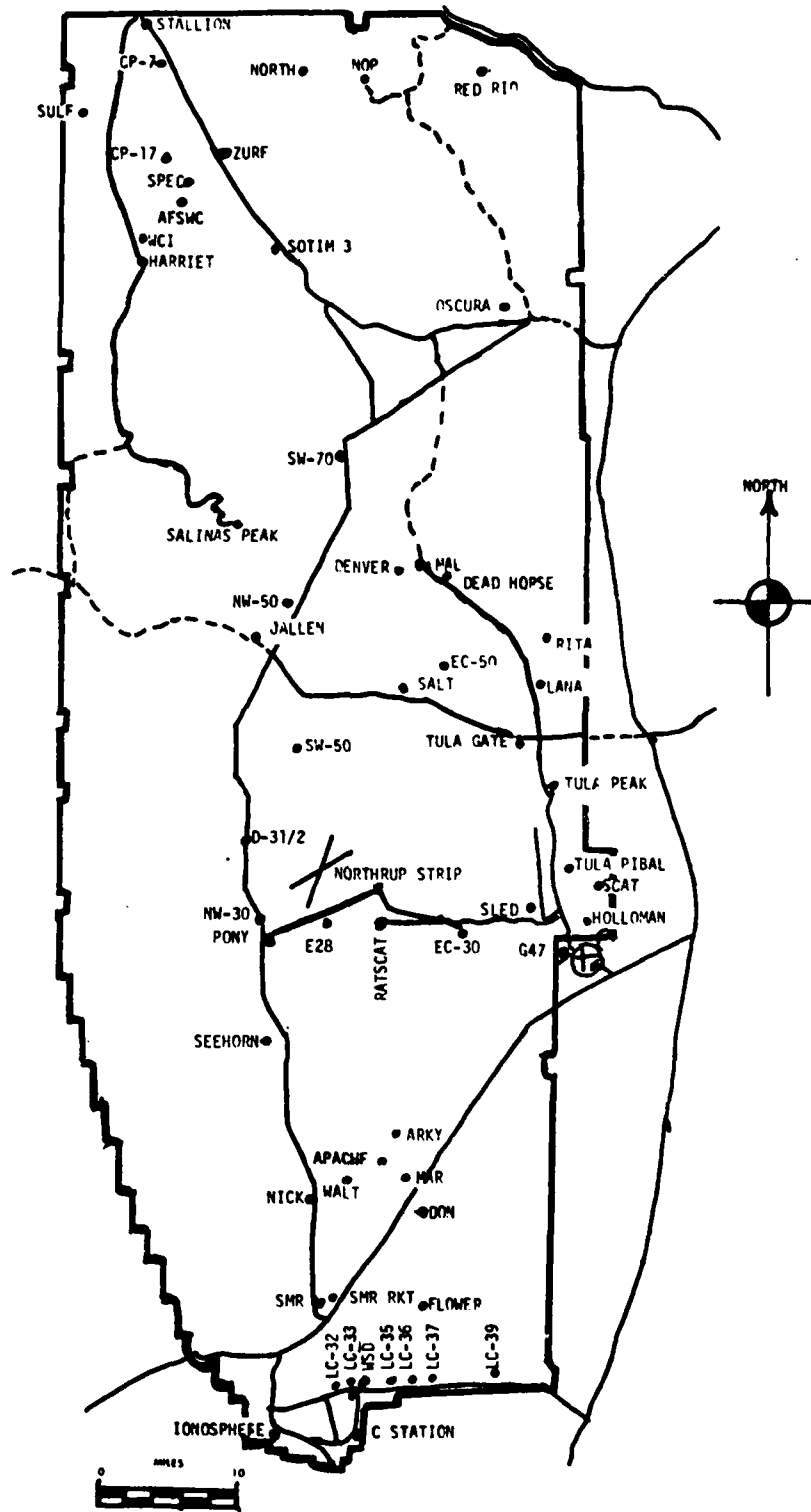


TABLE 1		STATION DON SITE	
DATE 25	Feb	X=511,396.36	Y= 247,396.36 H=3996.8
DAY	MONTH YEAR		

[illegible]

OBSTRUCTIONS TO VISIBILITY	CLOUDS						REMARKS
	1st LAYER		2nd LAYER		3rd LAYER		
	AMT	TYPE	HGT	AMT	TYPE	HGT	
1	SC	2000	9	SC	E4500		RW

PSYCHROMETRIC CALCULATION			
TIME:	0906		
DRY BULB TEMP.	3.4		
WET BULB TEMP.	2.1		
WET BULB DEPR.	1.3		
DEW POINT	0.6		
RELATIVE HUMID.	82		

PILOT BALLOON MEASURED WIND DATA

TABLE 2

RELEASED FROM Don Site DATE 25 Feb 82 TIME 0851 MST

COORDINATES (WSTM) X= 511,988.37 Y= 247,396.36 H= 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO True North .

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	200	05
60	192	10
120	189	15
180	188	20
240	181	20
300	175	20
360	168	20
470	159	20
480	150	21
540	144	22
600	141	22
660	138	24
720	139	23
780	141	22
840	144	20
900	148	19
960	153	18
1020	157	18
1080	161	17
1140	166	16
1200	170	16
1260	176	15
1320	178	15
1380	178	16
Balloon Lost in Overcast		

[illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 3

RELEASED FROM Don Site DATE 25 Feb 82 TIME 0906 MST

COORDINATES (WSTM) X= 511,988.37 Y= 247,396.36 H= 3996.83

NOTE: WIND DIRECTIONS ARE REFERENCED TO True North.

HEIGHTS ARE METERS AGL X OR FEET AGL_____.

[illegible][illegible][illegible]

PILOT BALLOON MEASURED WIND DATA

TABLE 4

RELEASED FROM LC-36 DATE 25 Feb 82 TIME 0856 MST

COORDINATES (WSTM) X= 503,467.43 Y= 189,880.50 H= 4034.72

NOTE: WIND DIRECTIONS ARE REFERENCED TO True North .

HEIGHTS ARE METERS AGL X OR FEET AGL _____.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	170	08
60	MISG	
120	138	13
180	143	15
240	137	12
300	130	11
360	127	12
420	125	18
480	122	22
540	116	23
600	114	27
660	117	23
720	126	20
780	129	20
840	128	19
900	125	17
960	130	13
1020	135	10
1080	154	09
1140	157	10
1200	174	10
1260	135	11
1320	200	08
1380	227	06
1440	255	08
1500	268	10
1560	270	10
1620	274	11
1680	280	12
1740	283	14

[illegible][illegible]

RELEASED FROM LC-36

DATE 25 Feb 82

TIME 0906 MST

COORDINATES (WSTM) X= 503,467.43 Y= 189,880.50 H= 4034.72

HEIGHTS ARE METERS AGL XX OR FEET AGL.

HEIGHT AGL	DIRECTION DEGREES	SPEED KNOTS
SFC	180	07
60	MISG	
120	148	10
180	138	10
240	126	11
300	124	16
360	122	15
420	120	19
480	115	21
540	114	23
600	118	24
660	126	23
720	125	20
780	126	18
840	135	15
900	141	13
960	138	12
1020	133	11
1080	138	10
1140	147	08
1200	159	07
1260	176	09
1320	190	07
1380	206	05
1440	262	05
1500	273	09
1560	278	11
1620	277	10
1680	282	11
1740	278	10

[illegible][illegible]

TABLE 6

COMPUTER MET MESSAGE DATA

25 Feb 1982

WSD 0850 MST	NW-30 0800 MST	Jallen 0850 MST
METCM1324064	METCM1329065	METCM1332065
251580122886	251500122884	251580124883
00427010 27750886	00311005 27860884	00160004 27810883
01276007 27580875	01 MISG 27800873	01120007 27680872
02246011 27310848	02 MISG 27650847	02139006 27510845
03239018 27210807	03280015 27480806	03290009 27250804
04366006 27250758	04255013 27240757	04328013 27100755
05493010 27170712	05458010 27160711	05435014 27010709
06485016 26880668	06478020 26850668	06461019 26770666
07483012 26410627	07471020 26480626	07474022 26470624
08451015 26020588	08456022 26120587	08463020 26140585
09441015 25910550	09428017 25770550	09419014 25870548
10411020 25550515	10428019 25390514	10413015 25500513
11397022 25210482	11416021 25130481	11420018 25120480
12390026 24710435	12390029 24600434	12395026 24540433
13393027 23890378	13363038 23810377	13374033 23750376
14400036 23050327	14372044 22950326	14375037 22950325
15405040 22300281	15400038 22200280	15404035 22230279
16398042 21910241	16390051 21880240	16397043 21810239
17399051 22030207	17398053 21970206	17401049 22070205
18422050 22170177	18420046 22010176	18413042 22040176
19434055 21940152	19421055 21740151	19423054 21780150
20440049 21650130	20434050 21550129	20436051 21710129
21444052 21580111	21443050 21450110	21445044 21560110
22425038 21420095	22422042 21280094	22424039 21310094
23437031 21190081	23442033 21090080	23437036 21120080
24459021 21130069	24463018 20980068	24453020 20950068
25440010 20990059	25457012 20890058	25489009 21120058
26546011 21100050	26541007 20990049	26487012 21120049

STATION ALTITUDE 3909.00 FEET MSL
25 FEB. 62 0850 HRS MST
ASCENSION NO. 71

SIGNIFICANT LEVEL DATA

0560020071
WHITE JARVIS

TABLE 7

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
886.0	3989.0	3.4	-0.1	78.0
871.4	4430.3	1.1	-0.8	67.0
850.0	5085.6	-7	-1.8	92.0
833.4	5602.6	-1.9	-2.7	94.0
814.4	6206.2	-1.5	-2.5	94.0
767.8	7748.8	-1.9	-2.7	94.0
740.2	8709.3	-5	-1.5	94.0
700.0	10171.9	-2.9	-4.0	92.0
624.8	13106.0	-8.1	-9.0	89.0
600.0	13800.8	-9.3	-17.5	51.0
587.7	14660.7	-11.5	-17.5	61.0
566.2	15598.1	-12.9	-17.7	67.0
541.6	16707.8	-15.0	-21.0	80.0
525.0	17451.2	-16.8	-24.5	51.0
500.0	18678.4	-19.4	-31.5	33.0
486.4	19351.1	-20.6	-27.0	53.0
471.2	20120.8	-22.5	-34.0	34.0
456.2	20899.7	-24.1	-37.7	27.0
448.6	21302.5	-24.5	-32.5	47.0
434.0	22092.8	-26.1	-38.8	29.0
412.2	23312.7	-29.0	-39.0	37.0
400.0	24017.0	-30.8	-43.0	27.0
343.8	27486.0	-40.1		
330.8	28348.3	-42.1		
300.0	30501.0	-47.3		
270.0	32770.4	-52.3		
250.0	34404.7	-53.7		
236.8	35555.4	-52.8		
216.0	37502.1	-54.6		
200.0	39137.1	-51.4		
187.4	40532.3	-50.6		
173.8	42146.7	-51.7		
150.0	45282.0	-53.0		
140.6	46646.3	-56.1		
118.2	50273.9	-57.4		
111.2	51549.1	-56.5		
100.0	53760.3	-58.7		
95.2	54778.0	-50.5		
92.2	55440.0	-58.4		
83.2	57550.8	-61.7		

STATION ALTITUDE 3989.00 FEET MSL
 25 FEB. 62 0830 HRS MSJ
 ASCENSION NO. 71

SIGNIFICANT LEVEL DATA
 0560020071
 WHITE SANDS
 TABLE 7 Cont'd

CLOUDS: CUMULUS
 32.40043 LAT DEG
 106.37033 LONG DEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
70.0	61092.3	-61.3		
61.0	63095.0	-63.9		
50.0	67942.1	-61.7		
48.0	68774.7	-63.1		
43.2	70042.8	-58.0		
35.6	75000.7	-55.1		
30.6	78176.5	-57.9		
30.0	78592.1	-55.1		
28.2	79905.2	-53.1		
20.0	87261.3	-51.4		
17.8	89773.3	-50.3		

STATION ALTITUDE 3989.00 FEET SL
25 FEB. 62
ASCENSION NO. 71

UNPLD AIR DATA
056002007A
WHITE SANDS

GEOLITIC COORDINATES
32.40043 LAT DEG
106.57033 LONG DEG

TABLE 8

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
3989.0	880.0	3.4	78.0	1113.2	646.7	240.0	9.9	1.000278
4000.0	883.6	3.3	79.2	1113.0	646.0	239.5	9.8	1.000278
4500.0	869.1	.9	87.5	1102.0	645.7	211.5	7.5	1.000274
5000.0	852.8	-5.5	91.3	1086.8	644.1	173.7	7.9	1.000270
5500.0	836.7	-1.7	93.6	1071.1	642.0	151.2	10.7	1.000265
6000.0	820.8	-1.6	94.0	1050.7	642.7	150.1	14.5	1.000260
6500.0	805.3	-1.6	94.0	1030.5	642.6	149.0	14.9	1.000250
7000.0	790.1	-1.7	94.0	1011.5	642.0	150.3	12.9	1.000251
7500.0	775.1	-1.8	94.0	992.8	642.5	150.3	9.9	1.000247
8000.0	760.5	-1.5	94.0	972.9	642.9	104.7	6.3	1.000243
8500.0	740.1	-1.8	94.0	951.8	643.8	229.2	5.1	1.000240
9000.0	732.0	-1.0	93.6	934.4	643.0	203.5	6.9	1.000235
9500.0	716.2	-1.8	92.9	919.0	642.0	278.7	9.8	1.000230
10000.0	704.6	-2.6	92.2	905.1	641.0	275.0	11.7	1.000226
10500.0	691.2	-3.5	91.7	890.7	640.5	272.4	13.7	1.000221
11000.0	677.9	-4.4	91.2	870.6	639.4	272.4	14.5	1.000216
11500.0	664.9	-5.3	90.6	862.8	638.3	272.4	15.4	1.000212
12000.0	652.1	-6.1	90.1	849.1	637.2	274.4	14.8	1.000208
12500.0	639.6	-7.0	89.6	835.7	636.1	270.0	14.2	1.000203
13000.0	627.4	-7.9	89.1	822.5	635.0	273.1	13.0	1.000199
13500.0	615.2	-8.8	87.5	809.6	633.0	268.9	11.9	1.000192
14000.0	603.2	-9.8	87.5	797.2	632.5	262.2	13.2	1.000180
14500.0	591.4	-11.1	89.1	785.4	631.0	250.5	15.3	1.000184
15000.0	579.8	-12.0	89.1	772.7	629.9	252.5	16.6	1.000161
15500.0	568.4	-12.8	89.1	759.7	629.0	249.0	17.2	1.000178
16000.0	557.2	-13.7	89.1	747.3	627.9	240.1	17.4	1.000174
16500.0	546.1	-14.6	89.1	735.2	626.7	242.7	16.7	1.000171
17000.0	535.3	-15.7	89.1	723.8	625.3	230.9	16.0	1.000167
17500.0	524.6	-16.9	89.1	712.7	623.0	234.5	16.8	1.000163
18000.0	514.0	-18.0	89.1	701.3	622.5	230.5	17.7	1.000160
18500.0	503.6	-19.0	89.1	690.2	621.2	227.2	18.8	1.000157
19000.0	493.5	-20.0	89.1	678.7	620.0	224.4	19.9	1.000154
19500.0	483.4	-21.0	89.1	667.5	618.0	222.8	21.1	1.000152
20000.0	473.6	-22.2	89.1	657.2	617.2	222.5	22.3	1.000149
20500.0	463.8	-23.3	89.1	646.5	615.9	222.2	23.4	1.000146
21000.0	454.3	-24.2	89.1	635.6	614.0	221.5	24.0	1.000143
21500.0	444.9	-24.9	89.1	624.1	613.9	220.4	24.7	1.000141
22000.0	435.7	-25.9	89.1	613.0	612.0	219.5	25.7	1.000138
22500.0	426.0	-27.1	89.1	603.8	611.2	218.5	26.6	1.000136
23000.0	417.7	-28.3	89.1	594.0	609.7	216.4	27.7	1.000134

STATION ALTITUDE 3989.00 FEET MSL
25 FEB. 62
ASCENSION, NO. 71

UPPER AIR DATA
0560020071
WHITE SANDS
TABLE 8 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	TEMPERATURE DEW POINT DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION (DEGREES TRUE)	SPEED KNOTS	INDEX OF REFRACTION
23500.0	400.9	-29.5	-40.2	34.3	584.5	600.2	219.1	28.3	1.000131
24000.0	400.3	-30.8	-43.5	27.2	575.2	600.6	219.0	28.9	1.000129
24500.0	391.7	-32.1	-46.1	23.2**	560.0	604.9	220.4	27.9	1.000127
25000.0	383.2	-33.4	-48.8	19.3**	550.9	603.2	220.9	26.8	1.000124
25500.0	374.9	-34.8	-51.7	15.5**	547.9	601.5	221.1	26.4	1.000122
26000.0	366.8	-36.1	-55.4	11.6**	539.1	599.0	220.9	26.7	1.000120
26500.0	358.9	-37.5	-59.7	7.7**	530.5	598.1	220.7	26.9	1.000118
27000.0	351.2	-38.8	-66.0	3.8**	522.0	590.4	220.7	28.9	1.000116
27500.0	343.6	-40.1			513.7	594.7	220.0	30.9	1.000114
28000.0	336.0	-41.3			504.8	598.2	221.0	33.1	1.000112
28500.0	328.5	-42.5			490.1	591.7	223.7	35.5	1.000111
29000.0	321.2	-43.7			487.5	590.2	225.5	38.0	1.000109
29500.0	313.9	-44.9			479.1	580.0	226.9	38.9	1.000107
30000.0	306.9	-46.1			470.9	571.0	228.1	39.2	1.000105
30500.0	300.0	-47.3			462.8	568.5	229.1	39.4	1.000103
31000.0	293.1	-48.4			454.4	564.0	228.9	38.6	1.000101
31500.0	286.4	-49.5			440.1	562.0	228.0	37.8	1.000099
32000.0	279.8	-50.6			430.0	561.2	228.3	36.8	1.000098
32500.0	273.4	-51.7			421.7	570.7	228.1	40.9	1.000096
33000.0	267.1	-52.5			412.7	570.1	227.0	42.7	1.000094
33500.0	260.9	-52.9			403.9	577.6	227.7	43.3	1.000092
34000.0	254.8	-53.4			394.9	577.2	227.7	43.9	1.000090
34500.0	248.9	-53.6			385.1	577.7	224.6	44.1	1.000088
35000.0	243.1	-53.2			375.4	570.2	223.0	44.2	1.000086
35500.0	237.4	-52.8			367.3	577.0	222.2	44.3	1.000084
36000.0	231.9	-53.2			359.5	577.2	221.4	45.3	1.000082
36500.0	226.5	-53.7			351.8	570.5	221.4	46.3	1.000080
37000.0	221.2	-54.1			344.3	573.9	223.0	46.9	1.000078
37500.0	216.0	-54.6			334.8	577.2	225.1	47.2	1.000077
38000.0	211.0	-53.6			325.0	570.5	224.4	47.5	1.000075
38500.0	206.1	-52.6			310.0	579.8	223.7	48.1	1.000073
39000.0	201.3	-51.7			303.0	580.4	223.0	48.8	1.000071
39500.0	196.6	-51.2			301.1	580.0	226.1	47.7	1.000069
40000.0	192.1	-50.9			293.8	581.2	226.1	45.7	1.000067
40500.0	187.7	-50.6			287.4	580.0	223.0	44.6	1.000065
41000.0	183.4	-50.9			281.2	580.5	220.5	43.8	1.000064
41500.0	179.1	-51.3			275.2	579.9	220.5	47.1	1.000063
42000.0	175.0	-51.6			269.2	573.5	220.4	51.2	1.000061
42500.0	170.9	-51.9			263.5	573.1	220.7	55.6	1.000060
43000.0	167.0	-52.2						58.4	1.000059

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 3989.00 FEET MSL
25 FEB. 52
ASCENSION NO. 71

UPPER AIR DATA
0560020074
WHITE SANDS
TABLE 8 Cont'd

GEOGRAPHIC COORDINATES
32.40043 LAT DEG
106.37033 LON DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KNOTS	WIND DATA DIRECTION (FN) SPEED KNOTS	INDEX OF REFRACTION
43500.0	163.1	-52.5		257.5	570.7	240.4	1.000057
44000.0	159.3	-52.8		251.9	570.3	242.0	1.000050
44500.0	155.6	-53.1		246.4	571.9	243.4	1.000055
45000.0	152.0	-53.4		241.0	577.5	245.0	1.000054
45500.0	148.5	-54.0		236.0	570.7	246.1	1.000053
46000.0	145.0	-54.9		231.4	575.5	246.5	1.000052
46500.0	141.6	-55.8		227.0	574.5	246.0	1.000051
47000.0	138.2	-56.2		222.0	575.0	246.5	1.000049
47500.0	135.0	-56.4		216.9	575.5	246.5	1.000048
48000.0	131.8	-56.6		212.0	575.3	246.7	1.000047
48500.0	128.7	-56.8		207.1	575.1	247.0	1.000046
49000.0	125.6	-56.9		202.4	572.0	248.5	1.000045
49500.0	122.7	-57.1		197.8	572.6	248.0	1.000044
50000.0	119.8	-57.3		193.5	572.4	248.5	1.000043
50500.0	116.9	-57.2		188.7	572.4	249.0	1.000042
51000.0	114.2	-56.9		183.9	572.9	249.1	1.000041
51500.0	111.5	-56.5		179.3	575.4	249.7	1.000040
52000.0	108.8	-56.9		175.3	572.0	250.9	1.000039
52500.0	106.2	-57.4		171.6	572.2	251.9	1.000038
53000.0	103.7	-57.9		167.9	571.5	250.2	1.000037
53500.0	101.3	-58.4		164.5	570.0	248.1	1.000037
54000.0	98.8	-58.9		160.7	570.5	244.4	1.000036
54500.0	96.5	-59.3		157.2	569.7	239.9	1.000035
55000.0	94.2	-59.1		153.5	569.9	235.7	1.000034
55500.0	91.9	-58.5		149.2	570.0	235.0	1.000033
56000.0	89.7	-59.3		146.2	569.7	231.9	1.000033
56500.0	87.6	-60.1		143.2	568.7	231.9	1.000032
57000.0	85.5	-60.8		140.3	567.7	236.5	1.000031
57500.0	83.4	-61.6		137.4	566.0	241.5	1.000031
58000.0	81.4	-61.6		134.1	566.0	246.4	1.000030
58500.0	79.5	-61.6		130.6	566.0	251.1	1.000029
59000.0	77.5	-61.5		127.6	565.7	255.0	1.000028
59500.0	75.7	-61.5		124.5	566.0	255.0	1.000028
60000.0	73.8	-61.4		121.5	566.9	255.5	1.000027
60500.0	72.1	-61.4		118.5	566.9	255.4	1.000026
61000.0	70.3	-61.3		115.6	567.0	257.7	1.000026
61500.0	68.6	-61.7		112.0	566.5	261.2	1.000025
62000.0	66.9	-62.1		110.5	565.9	264.0	1.000025
62500.0	65.3	-62.6		108.1	565.5	268.1	1.000024
63000.0	63.7	-63.1		105.7	564.7	275.0	1.000024

STATION ALTITUDE 3989.00 FEET MSL
 25 FEB. 82 0850 HRS PST
 ASLENSION NO. 71

UPPER AIR DATA
 0560020071
 WHITE SANDS

GEODETIC COORDINATES
 32.40043 LAT N
 100.57033 LONG W

TABLE 8 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	REL. HUM. PERCENT	DENSITY GM/CM ³ METEC	SPEED OF SOUND M/S	DIRECTION DEGREES (TD)	WIND DATA SPEED KNOTS	INDEX OF REFRACTION
63500.0	62.2	-63.5		103.4	364.0	264.7	6.1	1.000023
64000.0	60.7	-63.8		101.0	363.0	263.1	8.4	1.000022
64500.0	59.2	-63.6		98.4	364.0	244.1	8.8	1.000022
65000.0	57.8	-63.3		95.9	364.4	244.7	8.3	1.000021
65500.0	56.4	-63.0		93.5	364.7	243.3	7.9	1.000021
66000.0	55.0	-62.8		91.1	365.1	232.0	7.5	1.000020
66500.0	53.7	-62.5		88.8	363.4	203.4	7.7	1.000020
67000.0	52.4	-62.2		86.5	363.0	202.4	8.4	1.000019
67500.0	51.1	-61.9		84.3	360.2	293.3	10.0	1.000019
68000.0	49.9	-61.8		82.2	360.4	300.9	12.0	1.000018
68500.0	48.7	-62.6		80.5	363.2	303.0	14.0	1.000018
69000.0	47.5	-62.6		78.5	363.3	293.9	14.5	1.000017
69500.0	46.3	-61.4		76.2	360.9	203.3	15.5	1.000017
70000.0	45.2	-60.2		74.0	360.5	275.1	15.6	1.000016
70500.0	44.1	-59.0		71.8	370.0	208.2	13.2	1.000016
71000.0	43.1	-58.0		69.7	371.5	208.3	11.0	1.000016
71500.0	42.1	-57.6		68.0	372.0	200.0	7.4	1.000015
72000.0	41.1	-57.2		66.3	372.4	309.0	3.5	1.000015
72500.0	40.1	-56.9		64.6	372.9	17.7	0.0	1.000014
73000.0	39.2	-56.5		63.0	373.4	20.4	7.3	1.000014
73500.0	38.2	-56.2		61.4	373.9	23.4	5.9	1.000014
74000.0	37.3	-55.8		59.9	374.3	10.0	4.5	1.000013
74500.0	36.5	-55.5		58.3	374.6	14.0	3.5	1.000013
75000.0	35.6	-55.1		56.9	373.3	8.9	2.6	1.000013
75500.0	34.8	-55.5		55.7	374.7	30.0	1.7	1.000012
76000.0	33.9	-56.0		54.5	374.1	33.5	1.8	1.000012
76500.0	33.1	-56.4		53.3	373.5	00.4	3.2	1.000012
77000.0	32.4	-56.9		52.1	372.9	70.1	4.8	1.000012
77500.0	31.6	-57.3		51.0	372.4	75.0	4.2	1.000011
78000.0	30.9	-57.7		49.9	371.0	03.7	2.8	1.000011
78500.0	30.1	-55.7		48.3	374.3	113.2	1.6	1.000011
79000.0	29.4	-54.5		46.9	370.1	32.9	.1	1.000010
79500.0	28.7	-53.7		45.0	377.1	309.7	1.9	1.000010
80000.0	28.1	-53.1		44.4	377.9	308.0	3.8	1.000010
80500.0	27.4	-53.0		43.4	370.1	306.3	4.2	1.000010
81000.0	26.8	-52.8		42.4	370.2	307.7	4.2	1.000009
81500.0	26.2	-52.7		41.4	373.4	307.1	4.2	1.000009
82000.0	25.6	-52.6		40.4	373.3	312.0	5.2	1.000009
82500.0	25.0	-52.5		39.4	370.7	310.3	6.4	1.000009
83000.0	24.4	-52.4		38.5	373.0	319.2	7.7	1.000009

STATION ALTITUDE 3989.00 FEET SL
25 FEB. 62 0850 HRS MST
ASCENSION NO. 71

UPPER AIR DATA
0560020074
WHITE SANDS
TABLE 8 Cont'd

GEODETIC COORDINATES
32.40043 LAT DEG
106.37033 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES	TEMPERATURE DUMPOINT CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	WIND DATA DIRECTION (FN) SPEED KIOTS	INDEX OF REFRACTION
83500.0	23.8	-52.3			37.0	579.0	310.0	1.0000008
84000.0	23.5	-52.2			36.7	579.1	311.9	1.0000006
84500.0	22.8	-52.0			35.8	579.3	305.0	1.0000008
85000.0	22.2	-51.9			35.0	579.4	297.0	1.0000008
85500.0	21.7	-51.8			34.2	579.0	282.0	1.0000008
86000.0	21.2	-51.7			33.4	579.8	250.0	1.0000007
86500.0	20.7	-51.6			32.6	579.9	230.1	1.0000007
87000.0	20.2	-51.5			31.8	580.1	238.0	1.0000007
87500.0	19.8	-51.3			31.1	580.3	238.0	1.0000007
88000.0	19.3	-51.1			30.3	580.0		1.0000007
88500.0	18.9	-50.9			29.6	580.8		1.0000007
89000.0	18.5	-50.6			28.9	581.1		1.0000006
89500.0	18.0	-50.4			28.2	581.4		1.0000006

STATION ALTITUDE 3980.00 FEET .SL
25 FEB. 82 0850 HRS PST
ASCENSION NO. 71

MANDATORY LEVELS
0560020071
WHITE SANDS
TABLE 9

GEODTIC COORDINATES
32.40043 LAT DLG
106.37033 LON DEG

PRESSURE GEO. ORIENTAL		TEMPERATURE		HUMIDITY		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	DIRECTION DEGREES (TN)	SPEED KNOTS	
850.0	5082.	-7	-1.8	92.	170.0	0.2	
800.0	6688.	-1.6	-2.5	94.	142.9	14.2	
750.0	8356.	-1.0	-1.8	94.	210.0	5.1	
700.0	10162.	-2.9	-4.0	92.	274.0	12.4	
650.0	12079.	-6.3	-7.6	90.	274.8	14.7	
600.0	14121.	-10.2	-17.5	55.	200.5	15.7	
550.0	16303.	-14.3	-19.8	62.	244.0	17.0	
500.0	18652.	-19.4	-31.5	35.	220.2	19.2	
450.0	21190.	-24.4	-33.3	43.	220.9	24.3	
400.0	23978.	-30.8	-43.6	27.	219.8	28.9	
350.0	27035.	-39.0	-67.3	5.44	220.0	29.1	
300.0	30441.	-47.3			229.2	39.4	
250.0	34331.	-53.7			227.0	44.1	
200.0	39044.	-51.4			225.6	49.0	
175.0	41804.	-51.6			238.5	51.0	
150.0	45161.	-53.6			245.8	53.3	
125.0	48967.	-57.0			240.5	49.3	
100.0	53595.	-58.7			246.7	38.3	
80.0	58167.	-61.6			249.5	30.3	
70.0	60843.	-61.3			250.0	22.8	
60.0	64001.	-63.7			248.8	8.6	
50.0	67688.	-61.7			299.7	11.6	
40.0	72263.	-56.8			10.5	0.1	
30.0	78258.	-55.1			110.5	1.5	
25.0	82111.	-52.5			315.8	0.3	
20.0	86854.	-51.4			238.0	2.3	

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

0560220000
NW 30

52.00497 LAI LEG
106.49714 LOH LEG

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
884.0	4010.4	4.6	1.3	79.0
859.0	5057.2	2.5	.9	89.0
818.3	6666.6	1.7	.8	94.0
769.7	7600.9	-1.4	-2.0	96.0
712.1	9717.6	-2.1	-2.6	96.0
702.5	10772.8	-1.8	-2.4	96.0
700.0	10166.0	-2.7	-3.2	96.0
627.6	12983.6	-8.5	-9.6	92.0
618.4	13359.9	-9.3	-13.9	99.0
609.7	13719.3	-10.5	-17.1	58.0
592.0	14463.4	-11.6	-16.0	59.0
583.2	14840.3	-12.4	-22.1	44.0
565.7	15603.2	-14.0	-34.9	15.0
539.9	16763.0	-16.3	-38.2	13.0
514.9	17927.5	-20.0	-42.8	11.0
500.0	18643.8	-19.8	-41.0	12.0
442.0	21613.4	-26.5	-42.2	21.0
426.4	22465.4	-27.7	-34.7	51.0
400.0	23964.4	-31.9	-30.2	65.0
382.4	25006.1	-34.1	-37.2	73.0
360.7	26342.2	-37.7	-44.6	48.0
353.9	26773.3	-38.6	-43.2	49.0
326.5	26575.6	-43.7		
313.3	29483.6	-46.2		
300.0	30429.5	-47.8		
260.8	32707.1	-53.3		
250.0	34316.7	-55.1		
230.0	36076.6	-53.6		
209.1	36087.4	-55.2		
200.0	39029.2	-52.4		
194.5	39624.7	-51.3		
189.5	40182.1	-51.5		
179.7	41314.5	-52.9		
170.5	42430.5	-53.4		
161.0	43642.7	-54.9		
150.0	45130.5	-55.9		
128.8	48317.9	-57.2		
125.0	48040.6	-58.6		
117.8	50160.5	-58.8		
114.4	50777.3	-57.9		

STATION ALTITUDE 4010.10 FEET MSL
 25 FEB. 62
 ASCENSION NO. 6

SIGNIFICANT LEVEL DATA
 0560220000
 11W 30

GEODETIC COORDINATES
 32.00497 LAT DEG
 106.49714 LON DEG

TABLE 10 Cont'd

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE MSL FEET	TEMPERATURE		REL. HUM. PERCENT
		AIR DEGREES	DEWPOINT CENTIGRADE	
107.3	52107.3	-58.7		
100.0	53561.6	-60.4		
91.3	55434.5	-60.1		
79.7	56215.9	-62.7		
70.0	60860.4	-62.1		
61.5	63477.3	-66.2		
56.8	65080.0	-63.3		
52.0	66874.4	-62.9		
50.0	67609.7	-64.3		
39.9	72292.2	-58.7		

GEOMETRIC COORDINATES
32.00497 LAT DEG
106.49714 LONG DEG

UPPER AIR DATA
0560220000
100 30

TABLE 11

STATION ALTITUDE 4010.0 FEET MSL
25 FEB. 62 0800 HRS MST
ASCENSION NO. 6

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CENTIGRADE	TEMPERATURE DEWPOINT CENTIGRADE	REL. HUM. PERCENT	DENSITY GM/CM ³ WATER	SPEED OF SOUND M/SEC	WIND DIRECTION DEGREES TRUE	WIND SPEED M/SEC	MOIST REL. FRACTION
4010.4	884.0	4.6	1.3	79.0	1105.0	650.2	175.0	5.1	1.000279
4500.0	867.9	3.6	1.1	83.7	1089.3	649.1	164.4	8.7	1.000275
5000.0	851.8	2.6	.9	88.5	1073.0	647.9	160.1	12.5	1.000272
5500.0	835.9	2.1	.9	91.2	1054.7	647.0	157.0	16.4	1.000268
6000.0	820.4	1.8	.8	93.7	1036.5	646.9	157.3	17.3	1.000264
6500.0	805.0	.9	.1	94.5	1020.4	645.8	157.7	16.0	1.000258
7000.0	789.8	-1.1	-0.8	95.2	1004.9	644.0	150.0	15.7	1.000253
7500.0	775.0	-1.1	-1.6	95.8	989.0	643.5	153.0	15.6	1.000248
8000.0	760.4	-1.5	-2.1	96.0	972.6	642.9	148.0	12.3	1.000244
8500.0	740.0	-1.7	-2.2	96.0	954.8	642.7	144.0	8.6	1.000239
9000.0	731.9	-1.9	-2.4	96.0	937.3	642.5	140.0	4.4	1.000235
9500.0	710.0	-2.0	-2.6	96.0	920.1	642.3	130.0	6.9	1.000231
10000.0	704.5	-1.9	-2.4	96.0	902.1	642.0	120.0	12.6	1.000227
10500.0	691.0	-3.4	-4.0	95.5	890.1	640.7	124.0	16.1	1.000222
11000.0	677.7	-4.4	-5.1	94.8	876.5	639.4	127.1	18.7	1.000217
11500.0	664.7	-5.4	-6.2	94.1	863.1	638.1	127.9	19.7	1.000213
12000.0	652.0	-6.5	-7.4	93.4	850.0	636.8	128.2	20.3	1.000208
12500.0	639.5	-7.5	-8.5	92.7	837.0	635.0	128.7	20.1	1.000204
13000.0	627.2	-8.5	-9.7	91.0	824.3	634.3	124.0	20.1	1.000199
13500.0	615.0	-9.8	-15.1	84.7	812.5	632.0	121.0	20.5	1.000191
14000.0	603.0	-10.9	-17.5	58.4	800.2	631.2	129.4	20.8	1.000187
14500.0	591.1	-11.7	-18.3	57.5	786.9	630.2	128.0	21.2	1.000183
15000.0	579.5	-12.7	-24.1	37.9	774.8	628.9	125.2	20.1	1.000177
15500.0	568.0	-13.8	-32.4	18.9	762.6	627.5	121.5	18.8	1.000172
16000.0	556.7	-14.8	-36.0	14.3	750.5	626.3	124.0	17.7	1.000169
16500.0	545.6	-15.8	-37.4	13.5	738.4	625.0	129.0	17.2	1.000160
17000.0	534.7	-17.1	-39.1	12.6	727.3	623.5	127.9	17.4	1.000163
17500.0	523.9	-18.6	-41.1	11.7	717.1	621.5	128.0	18.1	1.000161
18000.0	513.4	-20.0	-42.7	11.1	706.3	619.9	128.0	19.1	1.000158
18500.0	503.0	-19.8	-42.0	11.8	691.6	620.1	129.0	20.1	1.000155
19000.0	492.7	-20.6	-41.6	13.1	679.5	619.1	128.0	21.0	1.000152
19500.0	482.5	-21.7	-41.5	14.6	668.5	617.8	129.2	21.8	1.000150
20000.0	472.6	-22.9	-41.6	16.1	657.7	616.4	128.0	22.6	1.000147
20500.0	462.9	-24.0	-41.7	17.6	647.1	615.0	128.0	24.2	1.000145
21000.0	453.4	-25.1	-41.8	19.1	636.7	613.0	127.9	25.7	1.000143
21500.0	444.1	-26.2	-42.1	20.7	626.5	612.2	128.1	27.4	1.000140
22000.0	434.9	-27.0	-37.9	34.6	615.4	611.2	128.0	29.2	1.000139
22500.0	425.8	-27.8	-34.7	51.3	604.4	610.3	128.0	30.9	1.000137
23000.0	416.8	-29.2	-35.2	56.0	593.0	608.0	121.0	32.6	1.000134
23500.0	408.0	-30.6	-35.7	60.7	585.6	606.0	120.0	34.1	1.000132

STATION ALTITUDE 4010.40 FEET SL
25 FEB. 62 0800 HRS MSJ
ASCENSION NO. 6

UPPER AIR DATA
0560220000
1W 30

GEOLUTL. COORDINATES
32.00497 LAT DEG
106.49714 LON DEG

TABLE 11 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CE.	DEWPOINT CE.	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND KILOTS	WIND DATA DIRECTION (IN) SPEED (IN) KNOTS	INDEX OF REFRACTION
24000.0	399.4	-32.0	-36.3	65.3	570.7	603.1	207.5	1.000130
24500.0	390.9	-33.0	-36.7	69.1	566.9	603.0	200.1	1.000128
25000.0	382.5	-34.1	-37.2	73.0	557.2	602.4	204.9	1.000126
25500.0	374.2	-35.4	-39.8	63.8	548.3	600.7	203.0	1.000123
26000.0	366.1	-36.8	-42.6	54.4	539.5	599.0	203.0	1.000121
26500.0	358.2	-38.0	-44.8	48.4	530.7	597.4	202.4	1.000119
27000.0	350.3	-39.2	-47.0	42.8**	521.7	595.9	202.4	1.000117
27500.0	342.6	-40.7	-51.6	29.2**	513.3	594.0	203.1	1.000115
28000.0	335.0	-42.1	-57.9	15.6**	505.0	592.2	204.3	1.000113
28500.0	327.6	-43.5	-73.6	2.1**	496.9	590.4	206.9	1.000111
29000.0	320.3	-44.9			488.7	588.6	210.1	1.000109
29500.0	313.1	-46.2			480.6	586.9	213.2	1.000107
30000.0	305.0	-47.1			471.5	585.8	220.4	1.000105
30500.0	297.0	-48.0			462.6	584.0	223.2	1.000103
31000.0	292.1	-49.2			454.4	583.0	225.6	1.000101
31500.0	285.4	-50.4			446.3	581.5	225.2	1.000099
32000.0	278.8	-51.6			438.4	579.9	224.4	1.000098
32500.0	272.4	-52.8			430.7	578.3	222.9	1.000096
33000.0	266.1	-53.6			422.3	577.2	221.3	1.000094
33500.0	259.9	-54.2			413.4	576.5	219.9	1.000092
34000.0	253.8	-54.7			404.0	575.7	218.6	1.000090
34500.0	247.8	-54.9			395.7	575.3	218.6	1.000088
35000.0	242.0	-54.5			385.7	576.0	219.0	1.000086
35500.0	236.4	-54.1			375.9	576.0	219.4	1.000084
36000.0	230.8	-53.7			366.4	577.2	219.4	1.000082
36500.0	225.4	-53.9			358.2	576.8	219.5	1.000080
37000.0	220.2	-54.3			350.5	576.3	220.0	1.000078
37500.0	215.0	-54.7			342.9	575.0	220.0	1.000076
38000.0	210.0	-55.1			335.5	575.2	222.4	1.000075
38500.0	205.1	-54.0			325.9	576.8	225.0	1.000073
39000.0	200.3	-52.5			316.2	576.7	227.1	1.000070
39500.0	195.6	-51.5			307.5	580.0	228.0	1.000068
40000.0	191.1	-51.4			300.3	580.1	230.7	1.000067
40500.0	186.7	-51.9			293.9	579.5	232.2	1.000065
41000.0	182.4	-52.5			287.9	578.7	233.0	1.000064
41500.0	178.1	-53.0			281.9	576.1	234.0	1.000063
42000.0	174.0	-53.2			275.6	577.6	235.0	1.000061
42500.0	169.9	-53.5			269.5	577.4	236.0	1.000060
43000.0	165.0	-54.1			264.0	576.0	236.0	1.000059
43500.0	162.1	-54.7			258.5	575.6	236.0	1.000058

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4010.40 FEET SL
25 FEB. 62 0800 HRS MST
ASCENSION NO. 6

UPPER AIR DATA
056020000
1W 30

TABLE 11 Cont'd

GEODETIC COORDINATES
32.00497 LAT DEG
106.49714 LONG DEG

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DIRECTION (IN) DEGREES	WIND SPEED KNOTS	INDEX OF REFRACTION
44000.0	150.3	-55.1		252.9	575.2	237.4	50.9	1.000050
44500.0	154.6	-55.5		247.4	574.8	238.2	50.0	1.000055
45000.0	150.9	-55.8		241.9	574.3	239.2	49.2	1.000054
45500.0	147.4	-56.1		238.5	574.0	240.4	48.5	1.000053
46000.0	143.9	-56.3		231.1	573.7	241.0	47.9	1.000051
46500.0	140.5	-56.5		223.9	573.5	242.1	48.1	1.000050
47000.0	137.2	-56.7		220.7	573.2	242.5	48.5	1.000049
47500.0	133.4	-56.9		215.7	572.9	242.5	48.8	1.000048
48000.0	130.8	-57.1		210.8	572.7	243.5	49.2	1.000047
48500.0	127.7	-57.6		205.4	572.0	243.8	49.6	1.000046
49000.0	124.6	-58.6		202.4	570.6	244.9	50.7	1.000045
49500.0	121.7	-58.7		197.6	570.5	248.2	52.0	1.000044
50000.0	118.8	-58.8		193.0	570.5	247.5	53.0	1.000043
50500.0	115.9	-58.3		188.0	571.0	248.4	53.4	1.000042
51000.0	113.2	-58.0		183.3	571.4	249.4	53.8	1.000041
51500.0	110.5	-58.3		179.2	571.0	248.6	51.4	1.000040
52000.0	107.9	-58.6		175.2	570.6	248.2	49.0	1.000039
52500.0	105.3	-59.2		171.4	569.9	247.0	46.7	1.000038
53000.0	102.8	-59.7		167.7	569.1	244.5	44.7	1.000037
53500.0	100.3	-60.3		164.2	568.3	241.8	42.8	1.000037
54000.0	97.9	-60.3		160.2	568.3	239.7	41.4	1.000036
54500.0	95.5	-60.2		158.3	568.4	238.1	40.3	1.000035
55000.0	93.2	-60.2		152.5	568.5	238.4	39.3	1.000034
55500.0	91.0	-60.2		148.9	568.0	237.0	38.8	1.000033
56000.0	88.8	-60.6		145.6	567.9	238.1	38.4	1.000032
56500.0	86.7	-61.1		142.4	567.5	239.7	37.9	1.000032
57000.0	84.6	-61.6		139.3	568.7	242.6	37.1	1.000031
57500.0	82.5	-62.0		138.2	568.1	248.0	36.4	1.000030
58000.0	80.5	-62.5		133.2	565.4	248.2	35.3	1.000030
58500.0	78.6	-62.6		130.1	565.2	250.2	34.0	1.000029
59000.0	76.7	-62.5		128.8	565.4	252.5	32.8	1.000028
59500.0	74.8	-62.4		123.7	565.5	251.5	29.4	1.000028
60000.0	73.0	-62.3		120.6	565.7	250.0	28.0	1.000027
60500.0	71.2	-62.2		117.7	565.9	248.2	22.5	1.000026
61000.0	69.5	-62.3		114.9	565.7	248.0	18.6	1.000026
61500.0	67.8	-63.1		112.5	564.8	247.6	15.1	1.000025
62000.0	66.2	-63.9		110.1	563.6	247.9	11.6	1.000025
62500.0	64.5	-64.7		107.9	562.5	250.5	10.1	1.000024
63000.0	63.0	-65.5		105.8	561.5	267.4	8.9	1.000024
63500.0	61.4	-66.2		103.4	560.5	277.5	8.3	1.000023

STATION ALTITUDE 4010.00 FEET MSL
25 FEB. 62 0800 HRS MST
ASCENSION NO. 6

UPPER AIR DATA
0560220000
10M 30

CLOUD TOP COORDINATES
10000 000000
10000 000000

TABLE 11 CONT'D

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION KNOTS	INDEX OF REFRACTION
04000.0	59.9	-65.3		100.4	361.7	203.7	1.000022
04500.0	50.5	-64.3		97.5	362.9	209.9	1.000022
05000.0	57.0	-63.4		94.7	364.2	209.1	1.000021
05500.0	55.6	-63.2		92.3	364.5	200.7	1.000021
06000.0	54.3	-63.1		90.0	364.6	205.2	1.000020
06500.0	53.0	-63.0		87.8	364.6	290.3	1.000020
07000.0	51.7	-63.1		85.7	364.6	295.4	1.000019
07500.0	50.4	-64.0		84.0	363.4	297.0	1.000019
08000.0	49.2	-63.9		81.9	363.5	293.0	1.000018
08500.0	48.0	-63.3		79.7	364.4	209.0	1.000017
09000.0	46.9	-62.7		77.6	363.2	203.3	1.000017
09500.0	45.7	-62.1		75.5	360.0	200.0	1.000017
70000.0	44.6	-61.5		73.4	360.8	260.9	1.000016
70500.0	43.5	-60.9		71.5	367.6		1.000016
71000.0	42.5	-60.3		69.5	360.4		1.000015
71500.0	41.5	-59.7		67.7	369.2		1.000015
72000.0	40.5	-59.1		65.9	370.0		1.000015

STATION ALTITUDE 4010.00 FEET MSL
25 FEB. 62
0800 HRS MST
ASCENSION NO. 6

MANDATORY LEVELS
0560220000
10W 30

GEODETI. COORDINATES
32.00497 LAT DEG
106.49714 LONG DEG

TABLE 12

PRESSURE GEOPOTENTIAL MILLIBARS	FELT	TEMPERATURE AIR DEGREES CENTIGRADE	REL. HUM. PERCENT	WIND DATA	
				DIRECTION (DEGREES TRUE)	SPEED (KNOTS)
850.0	5054.	2.5	89.	159.8	12.9
800.0	6660.	.6	93.	157.7	13.7
750.0	8353.	-1.6	96.	141.6	9.9
700.0	10156.	-2.7	90.	262.7	14.4
650.0	12073.	-6.6	93.	260.0	20.3
600.0	14109.	-11.1	59.	259.0	20.9
550.0	16284.	-15.4	14.	240.1	17.1
500.0	18619.	-19.8	12.	238.3	20.3
450.0	21155.	-25.5	20.	226.1	20.3
400.0	23926.	-31.9	63.	207.7	33.1
350.0	26976.	-39.3	42.44	202.5	40.2
300.0	30371.	-47.8		222.7	36.5
250.0	34245.	-55.1		218.4	40.4
200.0	38939.	-52.4		227.1	51.7
175.0	41775.	-53.2		235.3	55.3
150.0	45013.	-55.9		239.5	49.0
125.0	48804.	-58.6		244.7	50.4
100.0	53400.	-60.4		241.0	42.7
80.0	57951.	-62.6		248.6	33.0
70.0	60656.	-62.1		248.1	20.1
60.0	63748.	-65.3		263.0	0.3
50.0	67420.	-64.3		293.9	9.3
40.0	71958.	-58.8			

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
25 FEB. 62 0850 HRS MST
ASCENSION NO. 9

SIGNIFICANT LEVEL DATA
0500000000,
JALLEN

GEODETIC COORDINATES
33.16/12 LAT N 116
106.49/511 LONG DEG

TABLE 13

PRESSURE MILLIBARS	GEOMETRIC ALTITUDE FEET	TEMPERATURE AIR DEGREES CENTIGRADE	TEMPERATURE DEWPOINT DEGREES CENTIGRADE	REL. HUM. PERCENT
882.7	4051.0	4.2	1.4	62.0
862.0	4072.2	3.9	-0.7	72.0
856.0	5056.1	2.0	-0.2	65.0
810.2	6321.0	-1.0	-1.7	95.0
742.4	8607.5	-2.9	-3.9	93.0
733.2	8033.0	-2.2	-3.3	92.0
700.0	10140.1	-3.9	-0.2	84.0
686.4	10648.0	-4.6	-9.4	69.0
654.8	11708.7	-5.9	-10.6	69.0
646.6	12428.9	-7.0	-13.0	62.0
605.2	13877.3	-10.6	-14.5	73.0
596.2	14256.3	-10.7	-17.7	56.0
578.4	15020.3	-12.4	-21.6	46.0
570.0	15387.3	-13.0	-34.1	15.0
551.1	16230.7	-13.9	-30.6	10.0
500.0	18634.1	-19.5	-43.2	10.0
470.0	20135.2	-23.1	-43.7	13.0
430.6	22233.0	-28.2	-40.7	15.0
400.0	23949.4	-32.0	-50.4	14.0
329.4	28357.2	-43.3		
300.0	30411.0	-47.3		
256.6	33753.4	-55.4		
250.0	34300.8	-55.3		
237.6	35192.5	-55.9		
229.4	36107.8	-54.2		
210.8	37097.3	-53.4		
200.0	39017.9	-51.3		
183.8	40324.0	-51.9		
150.0	45126.1	-55.4		
133.2	47619.3	-55.8		
125.6	48850.9	-56.4		
118.2	50123.8	-55.9		
107.8	52647.6	-58.4		
100.0	53605.4	-59.0		
85.4	56352.9	-61.5		
70.0	60906.7	-63.1		
64.0	62720.2	-64.7		
59.0	64723.6	-60.8		
50.0	67761.5	-62.4		
41.0	71830.3	-59.6		

STATION ALTITUDE 4051.00 FEET SL
 25 FEB. 62 0850 HRS MSJ
 ASCENSION NO. 9

SIGNIFICANT LEVEL DATA
 056003000,
 JALLEN
 TABLE 13 Cont'd

GEODETIC COORDINATES
 33.10712 LAT DEG
 106.49511 LONG DEG

PRESSURE, GEOMETRIC ALTITUDE MILLIBARS MSL FEET	TEMPERATURE		WIND DIRECTION PERCENT
	AIR DEGREES	DEWPOINT CENTIGRADE	
37.4 73755.0	-55.4		
32.6 76637.4	-57.5		
30.0 78385.5	-54.5		
20.0 87021.9	-52.2		
12.6 96986.1	-49.4		
10.0 102055.8	-44.9		

STATION ALTITUDE 4051.00 FEET MSL
25 FEB. 62 0650 HRS MST
ASCENSION 110. 9

UPPER AIR DATA
050003000,
JALLER

GEODETIC COORDINATES
33.10/12 LAT DEG
100.49511 LONG DEG

TABLE 14

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
4051.0	882.7	4.2	82.0	1105.5	90.0	4.1	1.000260
4500.0	867.9	3.1	77.7	1091.8	100.0	4.6	1.000273
5000.0	851.8	2.1	84.3	1075.2	109.0	5.4	1.000270
5500.0	835.8	.9	89.5	1059.5	110.0	6.2	1.000265
6000.0	820.1	-2.2	92.5	1044.2	135.0	7.0	1.000261
6500.0	804.7	-1.1	94.8	1028.0	160.4	8.8	1.000256
7000.0	789.5	-1.6	94.4	1010.2	174.7	10.3	1.000251
7500.0	774.5	-2.0	94.0	992.6	185.0	11.6	1.000247
8000.0	759.8	-2.4	93.5	975.3	192.6	11.1	1.000242
8500.0	745.5	-2.8	93.1	958.4	201.1	10.8	1.000237
9000.0	731.3	-3.5	91.6	938.3	215.9	11.4	1.000233
9500.0	717.4	-3.0	89.2	923.0	229.9	12.8	1.000228
10000.0	703.8	-3.7	84.9	908.0	243.0	15.2	1.000223
10500.0	690.4	-4.4	73.4	893.3	251.0	17.2	1.000216
11000.0	677.1	-5.0	69.0	878.4	257.1	18.6	1.000211
11500.0	664.1	-5.6	69.0	863.5	259.0	19.3	1.000207
12000.0	651.4	-6.3	66.2	849.3	260.0	19.8	1.000203
12500.0	638.8	-7.2	62.5	835.0	263.0	20.4	1.000198
13000.0	626.4	-8.4	66.3	823.2	265.9	21.1	1.000195
13500.0	614.2	-9.7	70.1	811.1	266.0	21.9	1.000192
14000.0	602.3	-10.6	67.5	798.3	265.0	21.7	1.000188
14500.0	590.5	-11.2	52.8	784.7	262.0	21.0	1.000182
15000.0	578.9	-12.4	46.3	772.7	255.4	18.7	1.000178
15500.0	567.4	-13.1	44.3	760.0	245.9	16.6	1.000171
16000.0	556.2	-13.7	41.4	746.6	234.2	14.9	1.000166
16500.0	545.1	-14.5	40.0	734.2	229.4	14.1	1.000165
17000.0	534.2	-15.7	40.0	722.7	230.7	13.6	1.000162
17500.0	523.5	-16.9	41.2	711.5	235.2	14.2	1.000159
18000.0	513.0	-18.0	42.1	700.4	239.4	15.1	1.000157
18500.0	502.7	-19.2	43.0	689.5	236.1	16.2	1.000154
19000.0	492.5	-20.4	43.3	678.7	237.1	17.1	1.000152
19500.0	482.5	-21.6	43.4	668.0	236.0	17.3	1.000150
20000.0	472.6	-22.8	43.7	657.5	232.0	18.7	1.000147
20500.0	462.9	-24.0	44.2	647.1	228.2	20.9	1.000145
21000.0	453.3	-25.2	44.9	636.8	225.2	23.4	1.000142
21500.0	443.9	-26.4	45.6	626.7	223.2	25.4	1.000140
22000.0	434.6	-27.7	46.3	616.3	222.5	26.2	1.000138
22500.0	425.5	-28.8	47.3	606.7	222.0	27.5	1.000136
23000.0	416.5	-29.9	48.3	596.5	221.0	28.9	1.000134
23500.0	407.7	-31.0	49.4	586.6	219.9	29.9	1.000131

VELOCITY, COORDINATES
33.10712 LAT DEG
100.49511 LONG DEG

UPPER AIR DATA
0560030005
JALLEN

TABLE 14 Cont'd

STATION ALTITUDE 4051.00 FEET ASL
25 FEB. 62 0850 HRS MST
ASCENSION NO. 9

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³ METER	SPEED OF SOUND M/SEC	WIND DATA DIRECTION DEGREES (TN)	SPEED KNOTS	INDEX OF REFRACTION
24000.0	399.1	-32.1	13.8**	570.8	604.0	210.2	30.8	1.000129
24500.0	390.4	-33.4	12.3**	567.3	603.2	210.0	31.7	1.000127
25000.0	381.9	-34.7	10.7**	557.9	601.0	213.0	32.6	1.000124
25500.0	373.6	-36.0	9.1**	548.7	600.0	210.5	32.9	1.000122
26000.0	365.4	-37.3	7.5**	539.7	598.4	207.2	33.3	1.000120
26500.0	357.5	-38.5	5.9**	530.8	596.7	203.4	34.4	1.000118
27000.0	349.7	-39.8	4.3**	522.1	595.1	200.0	35.5	1.000116
27500.0	342.1	-41.1	2.7**	513.5	593.5	202.0	36.2	1.000114
28000.0	334.6	-42.4	1.1**	505.2	591.8	204.5	36.4	1.000113
28500.0	327.3	-43.6		496.6	590.3	209.2	35.8	1.000111
29000.0	319.9	-44.6		487.5	589.0	214.3	35.8	1.000109
29500.0	312.7	-45.5		478.6	587.8	219.1	36.6	1.000107
30000.0	305.7	-46.5		469.6	586.5	222.3	36.9	1.000105
30500.0	298.8	-47.5		461.3	585.2	224.5	36.6	1.000103
31000.0	291.9	-48.7		453.0	583.6	225.3	36.0	1.000101
31500.0	285.1	-49.9		445.0	582.0	226.1	35.2	1.000099
32000.0	278.5	-51.2		437.1	580.5	227.7	34.9	1.000096
32500.0	272.1	-52.4		429.3	578.9	227.7	34.9	1.000096
33000.0	265.8	-53.6		421.7	577.3	230.0	35.7	1.000094
33500.0	259.7	-54.8		414.2	575.7	231.9	37.0	1.000092
34000.0	253.6	-55.4		406.6	574.9	230.0	38.9	1.000090
34500.0	247.6	-55.4		398.2	574.8	228.0	40.5	1.000088
35000.0	241.8	-55.8		389.5	574.4	224.2	41.9	1.000086
35500.0	236.1	-55.3		377.0	573.0	221.0	44.1	1.000084
36000.0	230.6	-54.4		367.2	570.2	218.2	46.7	1.000082
36500.0	225.2	-54.0		356.0	570.7	217.3	49.7	1.000080
37000.0	219.9	-53.8		349.3	577.0	210.7	52.6	1.000078
37500.0	214.8	-53.6		340.8	577.3	220.2	51.0	1.000076
38000.0	209.8	-53.2		332.3	577.6	223.9	49.5	1.000074
38500.0	204.9	-52.3		323.2	579.0	227.3	47.8	1.000072
39000.0	200.2	-51.3		314.4	580.2	230.4	46.3	1.000070
39500.0	195.5	-51.5		307.3	580.1	229.7	45.2	1.000068
40000.0	191.0	-51.6		300.4	579.8	229.0	43.9	1.000067
40500.0	186.6	-51.8		293.7	579.6	228.0	41.8	1.000065
41000.0	182.3	-52.1		287.2	579.3	229.2	40.7	1.000064
41500.0	178.0	-52.5		281.1	579.7	231.2	43.3	1.000063
42000.0	173.9	-53.0		275.1	578.1	233.4	45.9	1.000061
42500.0	169.8	-53.4		269.2	577.5	235.7	48.6	1.000060
43000.0	165.8	-53.9		263.5	576.9	234.0	51.4	1.000059
43500.0	162.0	-54.3		257.9	576.3	235.2	52.2	1.000057

** AT LEAST ONE ASSUMED RELATIVE HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

STATION ALTITUDE 4051.00 FEET MSL
25 FEB. 82 0850 HRS PST
ASCENSION NO. 4

UPPER AIR DATA
0560030005
JALLEN

GEOLITIC COORDINATES
33.16/12 LAT DEG
106.49511 LON DEG

TABLE 14 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE AIR DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CUBIC METER	SPEED OF SOUND KIOTS	DIRECTION DEGREES (TN)	WIND SPEED KIOTS	INDEX OF REFRACTION
44000.0	150.2	-54.8		252.4	573.7	230.5	52.6	1.000050
44500.0	154.5	-55.2		247.0	573.1	238.1	52.7	1.000055
45000.0	150.9	-55.7		241.7	574.5	239.7	52.7	1.000054
45500.0	147.4	-55.8		236.2	574.3	240.4	51.4	1.000053
46000.0	143.9	-55.8		230.0	574.3	240.3	49.0	1.000051
46500.0	140.5	-55.8		225.2	574.3	240.0	47.3	1.000050
47000.0	137.2	-55.8		219.9	574.3	241.0	46.0	1.000049
47500.0	134.0	-55.8		214.7	574.3	242.0	46.8	1.000048
48000.0	130.8	-56.0		209.8	574.1	244.2	48.0	1.000047
48500.0	127.7	-56.2		205.1	573.8	245.9	50.1	1.000046
49000.0	124.7	-56.3		200.4	573.6	248.0	51.3	1.000045
49500.0	121.8	-56.1		195.5	573.9	250.0	51.7	1.000044
50000.0	118.9	-55.9		190.7	574.2	252.1	50.1	1.000042
50500.0	116.1	-56.3		186.5	573.7	254.1	48.4	1.000042
51000.0	113.3	-56.9		182.0	573.0	252.9	46.0	1.000041
51500.0	110.7	-57.4		176.7	572.2	251.0	43.6	1.000040
52000.0	108.0	-57.9		174.9	571.5	248.0	41.0	1.000039
52500.0	105.5	-58.3		171.0	571.0	243.9	39.8	1.000038
53000.0	103.0	-58.6		167.2	570.6	241.3	39.7	1.000037
53500.0	100.5	-58.9		163.4	570.2	239.0	40.3	1.000036
54000.0	98.1	-59.3		159.8	569.7	238.4	40.7	1.000036
54500.0	95.7	-59.7		156.3	569.2	237.7	40.8	1.000035
55000.0	93.4	-60.1		152.8	568.7	237.1	40.9	1.000034
55500.0	91.2	-60.5		149.4	568.2	238.3	39.6	1.000033
56000.0	89.0	-60.8		146.1	567.6	239.7	38.3	1.000033
56500.0	86.9	-61.2		142.8	567.1	241.5	38.0	1.000032
57000.0	84.8	-61.6		139.6	566.7	243.0	38.2	1.000031
57500.0	82.7	-61.8		136.3	566.4	245.0	38.0	1.000030
58000.0	80.7	-62.0		133.2	566.2	245.0	37.2	1.000030
58500.0	78.8	-62.2		130.1	565.9	246.2	36.5	1.000029
59000.0	76.9	-62.3		127.0	565.8	245.0	35.4	1.000028
59500.0	75.0	-62.5		124.1	565.4	245.4	34.4	1.000028
60000.0	73.2	-62.7		121.2	565.1	245.3	32.2	1.000027
60500.0	71.4	-62.9		118.3	564.8	245.0	29.1	1.000026
61000.0	69.7	-63.2		115.6	564.5	246.1	26.1	1.000026
61500.0	68.0	-63.6		113.0	563.9	248.4	24.0	1.000025
62000.0	66.3	-64.1		110.5	563.3	251.1	22.0	1.000025
62500.0	64.7	-64.5		108.0	562.7	252.9	21.2	1.000024
63000.0	63.1	-64.2		105.2	563.2	253.0	21.6	1.000023
63500.0	61.6	-63.2		102.2	564.5	254.3	21.9	1.000023

STATION ALTITUDE 4051.00 FEET MSL
25 FEB. 62 0850 HRS MST
ASCENSION NO. 9

UPPER AIR DATA
0560030000
JALLEN

GLOBULIN COORDINATES
33.16712 LAT DEG
100.49511 LONG DEG

TABLE 14 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	TEMPERATURE		REL. HUM. PERCENT	DENSITY GM/CURIC METER	SPEED OF SOUND KNOTS	WIND DATA		INDEX OF REFRACTION
		AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE				RELATION MILES (IN)	SPED KNOTS	
64000.0	60.1	-62.2			99.3	565.0	200.9	19.4	1.000002
64500.0	59.6	-61.2			98.4	567.1	200.6	16.5	1.0000021
65000.0	57.2	-60.9			93.9	567.5	207.9	13.4	1.0000021
65500.0	55.8	-61.2			91.8	567.2	203.7	9.9	1.0000020
66000.0	54.5	-61.5			89.7	568.0	215.0	8.1	1.0000020
66500.0	53.2	-61.7			87.6	568.5	229.0	8.5	1.0000020
67000.0	51.9	-62.0			85.6	568.1	235.3	9.1	1.0000019
67500.0	50.6	-62.3			83.7	565.7	240.5	9.7	1.0000019
68000.0	49.4	-62.2			81.0	565.0	233.1	9.6	1.0000018
68500.0	48.2	-61.9			79.5	566.2	227.0	9.7	1.0000018
69000.0	47.1	-61.5			77.5	566.7	220.7	9.7	1.0000017
69500.0	45.9	-61.2			75.5	567.2	228.0	9.7	1.0000017
70000.0	44.8	-60.9			73.6	567.0	229.4	9.7	1.0000016
70500.0	43.8	-60.5			71.7	568.1	233.3	9.2	1.0000016
71000.0	42.7	-60.2			69.9	568.5	238.2	8.7	1.0000016
71500.0	41.7	-59.8			68.1	569.0	241.9	8.0	1.0000015
72000.0	40.7	-59.2			66.2	569.0	243.4	6.8	1.0000015
72500.0	39.7	-58.1			64.4	571.2	245.5	5.7	1.0000014
73000.0	38.8	-57.1			62.5	572.7	244.9	4.4	1.0000014
73500.0	37.9	-56.0			60.7	574.1	240.1	3.1	1.0000013
74000.0	37.0	-55.6			59.2	574.0	228.0	1.9	1.0000013
74500.0	36.1	-55.9			57.9	574.2	211.4	1.2	1.0000013
75000.0	35.2	-56.3			56.0	573.7	200.3	.9	1.0000013
75500.0	34.4	-56.7			55.4	573.2	234.7	1.0	1.0000012
76000.0	33.6	-57.0			54.2	572.7	234.7	.7	1.0000012
76500.0	32.8	-57.4			53.0	572.2	234.7	.5	1.0000012
77000.0	32.0	-56.9			51.6	572.9	220.0	.3	1.0000011
77500.0	31.3	-56.0			50.2	574.1	240.5	1.6	1.0000011
78000.0	30.6	-55.2			48.8	575.2	234.1	2.9	1.0000011
78500.0	29.8	-54.5			47.5	576.1	233.6	3.9	1.0000011
79000.0	29.1	-54.3			46.4	576.5	249.0	4.3	1.0000010
79500.0	28.5	-54.2			45.3	576.5	240.0	4.7	1.0000010
80000.0	27.8	-54.1			44.2	576.0	245.3	4.7	1.0000010
80500.0	27.2	-53.9			43.2	576.8	244.0	4.4	1.0000010
81000.0	26.5	-53.8			42.1	577.0	244.2	4.0	1.0000009
81500.0	25.9	-53.7			41.1	577.2	244.7	4.3	1.0000009
82000.0	25.3	-53.5			40.2	577.5	245.5	4.8	1.0000009
82500.0	24.7	-53.4			39.2	577.5	240.1	5.3	1.0000009
83000.0	24.2	-53.3			38.3	577.7	242.0	5.6	1.0000009
83500.0	23.6	-53.1			37.4	577.9	230.4	5.8	1.0000008

STATION ALTITUDE 4051.00 FEET SL
25 FEB. 42 0850 HRS, MSJ
ASCENSION NO. 9

WINDY AIR DATA
0500030000
JALLEN

CLOUDY AIR COORDINATES
33.10712 LAT DEG
100.44311 LONG DEG

TABLE 14 Cont'd

GEOMETRIC ALTITUDE MSL FEET	PRESSURE MILLIBARS	AIR TEMPERATURE DEGREES CELSIUS	REL. HUM. PERCENT	DENSITY GM/CM ³	WIND SPEED KNOTS	WIND DIRECTION DEGREES (TR)	WIND SPEED KNOTS	INDEX OF REFRACTION
04000.0	22.9	-53.0		30.5	570.0	334.0	6.0	1.000008
04500.0	22.5	-52.9		30.6	570.2	330.0	6.2	1.000008
05000.0	22.0	-52.7		34.0	570.4	337.1	6.4	1.000008
05500.0	21.5	-52.6		33.9	570.0	339.0	6.0	1.000008
06000.0	21.0	-52.5		33.1	570.7	339.5	5.8	1.000007
06500.0	20.5	-52.3		32.3	570.9	339.0	4.8	1.000007
07000.0	20.0	-52.2		31.6	573.1	339.7	3.9	1.000007
07500.0	19.6	-52.1		30.8	579.3	330.2	2.9	1.000007
08000.0	19.1	-51.9		30.1	579.4	320.1	2.0	1.000007
08500.0	18.7	-51.8		29.4	579.0	265.1	1.4	1.000007
09000.0	18.2	-51.6		28.7	579.3	241.7	1.7	1.000006
09500.0	17.8	-51.5		28.0	580.0	235.7	1.5	1.000006
09000.0	17.4	-51.4		27.4	580.2	235.7	1.2	1.000006
09500.0	17.0	-51.2		26.7	580.4	235.7	.9	1.000006
09100.0	16.6	-51.1		26.1	580.5	245.1	.6	1.000006
09500.0	16.2	-50.9		25.5	580.7	274.0	.9	1.000006
09200.0	15.9	-50.8		24.9	580.9	267.9	1.3	1.000006
09500.0	15.5	-50.7		24.3	581.1	255.2	1.7	1.000005
09300.0	15.2	-50.5		23.7	581.3	265.1	1.7	1.000005
09500.0	14.8	-50.4		23.2	581.5	265.7	1.7	1.000005
09000.0	14.5	-50.2		22.6	581.0	240.2	1.9	1.000005
09500.0	14.1	-50.1		22.1	581.8	234.0	2.4	1.000005
09300.0	13.8	-50.0		21.0	582.0	223.1	4.5	1.000005
09500.0	13.5	-49.8		21.1	582.2	214.2	6.6	1.000005
09000.0	13.2	-49.7		20.6	582.4	217.2	6.6	1.000005
09500.0	12.9	-49.5		20.1	582.6	218.1	7.7	1.000004
09700.0	12.6	-49.4		19.6	582.8	220.7	3.6	1.000004
09500.0	12.3	-48.9		19.1	583.3	341.5	1.3	1.000004
09000.0	12.0	-48.5		18.7	583.9	28.1	5.2	1.000004
08500.0	11.8	-48.1		18.2	584.5	323.0	4.9	1.000004
09000.0	11.5	-47.6		17.8	585.1	280.1	8.7	1.000004
09500.0	11.2	-47.2		17.3	585.6	273.7	13.6	1.000004
10000.0	11.0	-46.7		16.9	586.2			1.000004
10500.0	10.7	-46.3		16.5	586.8			1.000004
101000.0	10.5	-45.8		16.1	587.4			1.000004
101500.0	10.3	-45.4		15.7	587.9			1.000003
102000.0	10.0	-44.9		15.3	588.5			1.000003

STATION ALTITUDE 4051.00 FEET ASL
25 FEB. 62 0850 HRS MSJ
ASCENSION NO. 9

MANDATORY LEVELS
056000000
JALLEN
TABLE 15

GEOMETRIC COORDINATES
33.10/12 LAT DEG
106.49511 LONG DEG

PRESSURE GEOPOTENTIAL		TEMPERATURE		HUMIDITY		WIND DATA	
MILLIBARS	FEET	AIR DEGREES CENTIGRADE	DEWPOINT CENTIGRADE	PERCENT	WIND DIRECTION DEGREES(TN)	SPEED KNOTS	
850.0	5053.	2.0	7.2	85.	110.7	5.5	
800.0	6049.	-1.3	-2.0	92.	165.0	9.6	
750.0	8335.	-2.7	-3.0	95.	197.7	10.8	
700.0	10131.	-3.0	-6.2	94.	246.4	10.0	
650.0	12043.	-6.4	-11.0	60.	201.1	13.9	
600.0	14080.	-10.7	-16.5	62.	204.5	21.6	
550.0	16261.	-14.0	-30.9	10.	220.0	14.4	
500.0	18609.	-19.5	-43.2	10.	237.9	10.5	
450.0	21147.	-25.6	-45.2	14.	224.5	24.3	
400.0	23912.	-32.0	-50.4	14.	210.4	30.7	
350.0	26956.	-39.4	-65.7	4.**	200.0	35.5	
300.0	30354.	-47.3			224.1	30.7	
250.0	34230.	-55.3			229.7	34.9	
200.0	38920.	-51.2			250.4	40.3	
175.0	41768.	-52.8			253.0	45.1	
150.0	45009.	-55.0			240.1	52.8	
125.0	48815.	-56.4			247.7	51.2	
100.0	53445.	-59.0			239.4	40.4	
80.0	58001.	-62.0			245.8	37.0	
70.0	60703.	-63.1			245.8	20.8	
60.0	63806.	-62.1			250.9	19.4	
50.0	67513.	-62.4			330.0	9.7	
40.0	72067.	-58.5			344.0	0.1	
30.0	78058.	-54.5			354.0	3.8	
25.0	91800.	-53.5			345.0	5.0	
20.0	86623.	-52.2			339.7	3.9	
15.0	92755.	-50.5			278.0	1.7	
10.0	101514.	-44.9					

** AT LEAST ONE ASSUMED REL TIME HUMIDITY VALUE WAS USED IN THE INTERPOLATION.

L MED
-88